

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
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April 20, 1999

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600 N. Dairy Ashford
Houston, Texas 77079

CERTIFIED MAIL NO. Z 039 960 271

William R. Gover, President
Kayo Oil Company and
Douglas Oil Company of California
600 N. Dairy Ashford
Houston, Texas 77079

CERTIFIED MAIL NO. Z 039 960 272

Re: Charnock Sub-Basin MTBE Contamination
PRP Site No. 6 – 11198 Washington Place, Culver City
Issuance of Unilateral Administrative Order
Docket No. RCRA-7003-09-99-0004

Dear Messrs. Dunham and Gover:

The United States Environmental Protection Agency ("EPA") hereby issues the enclosed Unilateral Administrative Order, Docket Number RCRA -7003-09-99-0004 pursuant to Section 7003 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. Section 6973, to address MTBE and other gasoline constituent contamination that may pose an imminent and substantial endangerment to public health and the environment. The Order requires Conoco, Inc., Kayo Oil Company, and Douglas Oil Company of California to take immediate action to investigate the magnitude and extent of releases of MTBE and other gasoline constituents from the former service station at 11198 Washington Place, Culver City, California. It is EPA's understanding that the California Regional Water Quality Control Board, Los Angeles Region, ("Regional Board") intends to issue a parallel order under State authorities with an identical scope of work. The purpose of these parallel orders is to allow the EPA and Regional Board to effectively continue our joint enforcement action to investigate and remediate the Charnock Sub-Basin MTBE contamination.

If you have any technical questions regarding the Order, please contact Steven Linder at (415) 744-2036 or Greg Lovato at (415) 744-2112. For any legal questions, please contact Laurie Williams at (415) 744-1387.

Sincerely,

Original signed by JA

Julie Anderson, Director
Waste Management Division

Enclosure: Unilateral Administrative Order, RCRA 7003-09-99-0004
cc list: attached

cc: (hard copy)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

In the Matter of:)	
)	
CONOCO INC.,)	U.S. EPA Docket No.
KAYO OIL COMPANY AND)	RCRA 7003-09-99-0004
DOUGLAS OIL COMPANY OF)	
CALIFORNIA)	
)	
Respondents.)	
_____)	

UNILATERAL ADMINISTRATIVE ORDER

TABLE OF CONTENTS

SECTION	Page
INTRODUCTION.	1
I. JURISDICTION AND PROCEDURE	1
II. PARTIES BOUND	1
III. FINDINGS OF FACT	2
IV. CONCLUSIONS OF LAW AND DETERMINATION	13
ORDER	14
V. DEFINITIONS	15
VI. WORK TO BE PERFORMED	17
VII. NOTICES AND SUBMISSIONS	17
VIII. APPROVALS/DISAPPROVALS	22
IX. ADDITIONAL RESPONSE ACTIVITIES	23
X. ACCESS TO PROPERTY OWNED OR LEASED BY RESPONDENTS AND DATA/DOCUMENT AVAILABILITY	23
XI. ACCESS TO PROPERTY NOT OWNED OR LEASED BY RESPONDENTS	24
XII. ENDANGERMENT AND EMERGENCY RESPONSE	26
XIII. RECORD PRESERVATION	27
XIV. PROJECT COORDINATORS	28
XV. QUALITY ASSURANCE, SAMPLING, DATA ANALYSIS AND PRIOR NOTICE OF FIELD ACTIVITIES	28
XVI. DELAY IN PERFORMANCE	29
XVII. RESERVATION OF RIGHTS, NON-WAIVER, COMPLIANCE WITH LAWS AND ENFORCEMENT	30
XVIII. LIABILITY INSURANCE	32
XIX. OPPORTUNITY TO CONFER	32

XX.	NOTICE OF INTENTION TO COMPLY	33
XXI.	PENALTIES FOR NON-COMPLIANCE	33
XXII.	NO FINAL AGENCY ACTION	34
XXIII.	EFFECTIVE DATE AND COMPUTATION OF TIME	34
XXIV.	MODIFICATION AND INTERPRETATION	34

ATTACHMENTS

- A. Scope of Work
- B. General Requirements
- C. Lease, March 1, 1977
- D. Unauthorized Release (Leak) Contamination Site Report,
August 31, 1992.
- E. Conoco's Letter to Regional Board, February 22, 1996
- F. Agencies' June 19, 1997 Letter to Conoco (w/o Appendices)
- G. Respondents' Joint Response to Agencies' Information
Requests, July 25, 1997.
- H. Texaco Submittal re: Introduction of MTBE at Texaco
Refinery, July 30, 1997.
- I. Agencies' July 20, 1998 Letter to Conoco
- J. Agencies' July 30, 1998 Letter to Conoco
- K. Conoco's September 4, 1998 Letter to EPA.
- L. Agreement of Settlement and Release between Conoco,
Kayo and Douglas, and Levy Trust, Landowner, dated
March 27, 1992.

Figure

- 1. Map of Charnock Sub-Basin Investigation Area

INTRODUCTION

This Order requires Respondent Conoco, Inc., and two of its wholly-owned subsidiaries, Respondents Kayo Oil Company and Douglas Oil Company of California, to investigate releases of the gasoline additive methyl tertiary-butyl ether ("MTBE") and other gasoline constituents from a former service station for which they have responsibility, located at 11198 Washington Place, Culver City (also known as "Potentially Responsible Party (PRP) Site No. 6" or "the Former Service Station Site"), as provided herein. The information that will be provided by this investigation is necessary for EPA to determine the nature, magnitude and extent of the releases from this location and the appropriate response.

I. JURISDICTION AND PROCEDURE

1. This Administrative Order is issued to Conoco, Inc., Kayo Oil Company and Douglas Oil Company of California (collectively "Respondents"), by the United States Environmental Protection Agency ("EPA") pursuant to the authority vested in the Administrator of EPA by Section 7003 of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Section 6901 et seq. ("RCRA"), which authority has been duly delegated to the Regional Administrator of EPA, Region IX, and redelegated to the Director of the Waste Management Division, Region IX. Notice of this Order has been provided to the State of California, as may be required by Section 7003(a) of RCRA, 42 U.S.C. Section 6973(a).

II. PARTIES BOUND

1. This Order shall apply to and be binding upon the Respondents identified in paragraph I.1., above, and their directors, officers, employees, agents, successors and assigns and upon all other persons and entities who are under the direct or indirect control of Respondents including, but not limited to, any contractors or independent agents or consultants acting under or for each of the Respondents in performing their obligations under this Order) until such time as the Work to be performed under Section VI has been completed.
2. No change in the ownership or legal status of Respondents, or of the property that comprises the Site, will in any way alter Respondents' obligations and responsibilities under

this Order.

3. Respondents shall provide a copy of this Order and all other documents approved under or pursuant to this Order which are relevant to conducting the Work to each contractor, sub-contractor, laboratory, or consultant retained to perform any Work under this Order, within five (5) days after the Effective Date of this Order or on the date such services are retained, whichever date occurs later. Respondents shall also provide a copy of this Order to each person representing any Respondent with respect to the Site or the Work and shall condition all contracts and subcontracts entered into for that purpose upon performance of the Work in conformity with the terms of this Order. Notwithstanding the terms of any contract, Respondents, and each of them, are responsible for compliance with this Order and for ensuring that their contractors, subcontractors and agents comply with this Order, and perform all Work in accordance with this Order.
4. At all times after service of this Order, Respondents shall provide a copy of this Order to any prospective owners or successors before a controlling interest in Respondents' assets, property rights or stock are transferred to the prospective owner or successor. Respondents shall notify EPA at least seven (7) days prior to such transfer.

III. FINDINGS OF FACT

A. Discovery of MTBE Contamination At Santa Monica's Charnock Wellfield and Agencies' Response

1. In August 1995, the City of Santa Monica discovered the gasoline additive methyl tertiary-butyl ether (MTBE) in drinking water supply wells at its Charnock Wellfield (drawing water from the Charnock Sub-Basin), located at 11375 Westminster Avenue, Los Angeles, California. At that time, the Charnock Wellfield had five operating municipal supply wells which provided approximately 45% of the drinking water for the City of Santa Monica's 87,000 customers (1990 U.S. Census). In 1996, levels of MTBE at the City's Charnock Wellfield rose to more than 600 parts per billion (ppb) and, by June 13, 1996, all of the supply wells at the Charnock Wellfield were shut down due to persistent and increasing levels of MTBE contamination.
2. In October, 1996, following the shutdown of the City of Santa Monica's Charnock Wellfield, the Southern California Water Company ("SCWC"), another water purveyor utilizing the Charnock Sub-Basin, shut down its wellfield in the Sub-Basin, in order to avoid spreading the contamination and drawing the

contamination toward the SCWC Wellfield.

3. As a result of the discovery of MTBE in the City of Santa Monica's ("City's") Charnock Wellfield and the shutdown of both of the wellfields in the Charnock Sub-Basin, both the City and SCWC (collectively "the Impacted Parties") began purchasing alternative water supplies from the Metropolitan Water District. The Impacted Parties have estimated the cost of water replacement to be approximately \$5 million per year above prior operating costs.
4. The City's and the SCWC's Charnock Wellfields (hereinafter "the Charnock Wellfields") draw groundwater from wells constructed in water-bearing layers referred to as the Silverado aquifer within the Charnock Sub-Basin. In attempting to understand the source of the MTBE found at the City's Charnock Wellfield, EPA and Regional Board (collectively "the Agencies") have studied the relationship between the Silverado aquifer and the shallow unnamed aquifer above it and have concluded that they are hydrogeologically connected. Geologic investigations within the Charnock Sub-Basin show that fine grained soils (such as clays and silts) between the Silverado aquifer and shallow unnamed aquifer are thin and laterally discontinuous. Therefore, these soils do not effectively restrict the movement of water vertically between the shallow unnamed aquifer and Silverado aquifer. Available data indicate that the area in the vicinity of the intersection of Sepulveda and Venice Boulevards, approximately 1500 feet northwest of the Former Service Station Site provides an interconnection between the shallow unnamed aquifer and the Silverado aquifer.
5. When the Charnock Wellfields were in operation, water in the shallow unnamed aquifer flowed, under the influence of gravity, to lower levels and into the Silverado aquifer. Groundwater in the Silverado aquifer beneath the Former Service Station Site is hydraulically upgradient from the Charnock Wellfields during normal operation of these wellfields.
6. The connection between the Silverado aquifer and the shallow unnamed aquifer is shown by the behavior of water levels in both of these saturated zones since groundwater extractions ceased at the City's wellfield in June 1996. Since that time, groundwater elevations in the Silverado aquifer began to rise. Saturation of the Silverado aquifer has reduced the downward migration of water from the shallow unnamed aquifer and, as a result, the groundwater elevations in the shallow unnamed aquifer beneath the Site have also risen. Groundwater elevations in the shallow unnamed aquifer beneath the Former Service Station Site have increased approximately 20 feet

since pumping ceased at the Charnock Wellfields, indicating a hydraulic connection between the Silverado aquifer and the shallow unnamed aquifer.

7. EPA, in consultation with the State, determined that a joint State and federal response was necessary to effectively protect the health of persons from the threat of MTBE contamination in the Charnock Sub-Basin and at the City's Charnock Wellfield. In April 1997, in order to pursue a coordinated effort to determine the source or sources of the MTBE at the City's wellfield and to remediate this environmental problem, EPA and the Regional Board entered into a Memorandum of Understanding ("MOU").
8. Pursuant to the MOU, the Agencies identified thirty (30) potential source sites within an approximate one and one-quarter mile radius of the City of Santa Monica's Charnock Wellfield. Two of the potential source sites were gasoline product pipelines, and twenty-eight of the potential source sites were underground storage tank systems ("USTs") where gasoline had been or was being stored. One of these twenty-eight UST sites was the Respondents' Former Service Station Site, which is eight-tenths of a mile south of the Charnock Wellfield. See Figure 1.
9. On June 19, 1997, the Agencies sent parties with responsibility for the potential source sites, including Respondent Conoco, letters requiring the production of information, including field work results, in order to determine which of the sites had contributed MTBE affecting the Charnock Sub-Basin. See Attachment F. Conoco was required to provide information and to conduct field work at the Former Service Station Site. That property, currently a vacant lot, is located near the southeast corner of the intersection of Washington Place and Sepulveda Boulevard, approximately eight-tenths of a mile south of the Charnock Wellfield.
10. The term "Site" as used in this Order refers to the area of the Former Service Station Site and all locations where MTBE and gasoline constituent contamination released from the Former Service Station Site have come to be located.

B. Description of Contaminants of Concern

11. Methyl tertiary-butyl ether (MTBE) is a synthetic, volatile, colorless, organic ether, with a turpentine-like taste and odor. The Chemical Abstracts Service ("CAS") registry number for MTBE is 1634-04-4. There are no known naturally occurring sources of MTBE. MTBE contains 18.2 percent oxygen by weight.

MTBE was approved as a gasoline additive in 1979. In the 1980s, MTBE was used in varying amounts as an octane enhancer. Since the passage of the Clean Air Act Amendments of 1990, MTBE has been used in gasoline in increasing quantities as an oxygenate in reformulated gasoline designed to produce cleaner burning fuel. Currently, most gasoline in California contains MTBE at concentrations between 11% and 15% by volume. On March 25, 1999, Governor Gray Davis of California issued an Executive Order requiring that MTBE be phased out of gasoline in the State no later than December 31, 2002, based on his finding that it posed "a significant risk to the environment."

12. The fate and transport of MTBE in the subsurface is significantly different from that of most gasoline constituents. Once released into the subsurface, MTBE separates from other gasoline constituents in the presence of moisture. MTBE has a strong affinity for water molecules and does not readily adsorb to soil particles. Rather, MTBE moves with groundwater at the rate of that water's movement. In addition, MTBE is more persistent than other gasoline constituents because it does not readily biodegrade in the subsurface. In comparison to other gasoline constituents, MTBE is significantly more mobile in the subsurface and will migrate from the source area more quickly. MTBE is also more difficult and expensive to remove from water than other gasoline constituents.
13. EPA's December, 1997, Drinking Water Advisory: Consumer Acceptability Advice and Health Effects Analysis on Methyl Tertiary-Butyl Ether (MTBE) ("1997 EPA Advisory") (Section 7.1) states: "the weight of evidence indicates that MTBE is an animal carcinogen, and the chemical poses a carcinogenic potential to humans (NSTC, 1997, page 4-26)." EPA has identified one of MTBE's metabolites, formaldehyde, as a probable human carcinogen (Group B1). The California Action Level for MTBE is 13 ppb. California's public health goal for MTBE in drinking water is 13 ppb. In January 1999, the State of California set a secondary maximum contaminant level (MCL)(based on taste and odor impacts) for MTBE of 5 ppb. The State is scheduled to issue a primary (health based) MCL in 1999. No federal MCL for MTBE has yet been adopted. However, EPA's Drinking Water Advisory, issued in 1997, set a level of 20 to 40 ppb for taste and odor. MTBE has been demonstrated to cause hepatic, kidney and central nervous system toxicity, peripheral neurotoxicity and cancer in animals.
14. When released into the environment, MTBE is a solid waste, as that term is used in RCRA Section 7003, 42 U.S.C. Section 6973. MTBE is a listed CERCLA hazardous substance (40 C.F.R. Part 302.4), based on its designation as a hazardous air

pollutant under the Clean Air Act (Section 112 of the Clean Air Act, 42 U.S.C. Section 7412).

15. When released into the environment, gasoline constituents are a solid waste, as that term is used in RCRA Section 7003, 42 U.S.C. Section 6973.
16. Gasoline constituents, other than MTBE, also pose a significant health threat. Specifically, benzene is a known human carcinogen (Class A) and leukemogen. Its systemic toxicity and carcinogenic effects are manifested in the liver, bone marrow, erythropoietic system and central nervous system. The federal primary MCL for benzene is 5 ppb and the State of California primary MCL for benzene is 1 ppb. Toluene and xylene are organic solvents, which are linked with toxic effects in the central nervous system, the liver, the kidney and the reproductive system. Ethylbenzene has demonstrated hepatic, kidney and central nervous system toxicity. See EPA Integrated Risk Information System (IRIS) 1999. Benzene and toluene are RCRA hazardous constituents as defined at 40 C.F.R. Part 261, Appendix VIII. Other oxygenates which have not been identified at the Former Service Station Site, but which would also pose a concern, if detected, include DIPE (Diisopropyl ether, CAS number 108-20-3), TAME (tert-amyl-methyl ether, CAS number 994-05-8), and ETBE (ethyl tert-butyl ether, CAS number 637-92-3).
17. Potential exposure pathways at the Site are as follows:
Ingestion of or direct contact with groundwater containing dissolved contaminants.
18. EPA has determined that the presence of MTBE and other gasoline constituents in the Charnock Sub-Basin may present an imminent and substantial endangerment to the health of persons and the environment as those terms are used in RCRA Section 7003, 42 U.S.C. Section 6973.

C. RESPONDENTS' STATUS

19. Respondent Conoco, Inc. ("Conoco") is a corporation, incorporated in the State of Delaware, whose principal place of business is 600 N. Dairy Ashford, Houston, Texas, 77079. Respondent is a "person" as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15) and 40 C.F.R. Section 260.10.
20. Respondent Kayo Oil Company ("Kayo") is a wholly-owned subsidiary of Respondent, Conoco, Inc., and is a corporation incorporated in the State of Delaware. Its principal place of business is 600 N. Dairy Ashford, Houston, Texas, 77079.

Respondent Kayo is a "person" as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15) and 40 C.F.R. Section 260.10.

21. Respondent Douglas Oil Company of California ("Douglas") is a wholly-owned subsidiary of Respondent, Conoco, Inc., and is a corporation incorporated in the State of California. Its principal place of business is 600 N. Dairy Ashford, Houston, Texas, 77079. Respondent is a "person" as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15) and 40 C.F.R. Section 260.10.

D. RESPONDENTS' LEASEHOLD AND ACTIVITIES

22. Respondent Douglas leased the property at 11198 Washington Place, Culver City, on March 21, 1962 from Nathan Levy and Florence Levy, in order to operate a gasoline service station. On or about March 1, 1977, Douglas again leased the service station property from David and Florence Levy, as Co-Trustees of the Residual Trust created pursuant to the Will of Nathan Levy. On September 1, 1978, Douglas entered into a sublease of the property to Oasis Petro Energy Corporation. Oasis Petro Energy was also known as Oasis Petroleum Corporation. On October 13, 1982, Douglas agreed to assignments of the sublease to other entities including a partnership called Pacific Oasis. By 1984, Paramount Petroleum Corporation had become a successor in interest to Oasis Petroleum Corporation. Paramount filed for bankruptcy on June 24, 1984. On July 6, 1984, Douglas agreed to an assignment of the sublease to George Adamian, which continued through the end of the period of Douglas's lease.
23. On January 15, 1987, Douglas assigned all of its interest in the Former Service Station Site to another wholly-owned subsidiary of Conoco, Respondent Kayo Oil Company.
24. Douglas's lease expired on April 30, 1992. Conoco has reported that during the post-1978 period, the Former Service Station Site was a Texaco branded facility. (See Letter from Conoco Counsel, dated September 4, 1998, and Respondents' jointly filed Information Request Response No. 8, dated July 25, 1997.) Texaco has informed EPA that it began adding MTBE to its gasoline at its Wilmington, California refinery in August 1989, almost three years before the former service station at the Site was demolished. (See Texaco submittal dated July 30, 1997, provided as Attachment H.)
25. Respondent Douglas acquired a property interest in the Former Service Station Site by leasing that property. In addition, Respondent Douglas agreed, in its March 1, 1977 Service Station Ground Lease, "to indemnify and hold Lessor

harmless from any claim or liability for injury or death of persons or damage to property arising in any manner from Lessee's use or occupancy of the leased premises." See Lease, provided as Attachment C. The Lease also provided that the Lessee would "promptly comply with all requirements of any public authority for the correction of any condition concerning the leased premises." The Lease specified that the property was to be surrendered to Lessor, at the end of the lease period "in as good condition as received." As a result of its lease of the property, Douglas is a past owner and/or operator of a facility, and has contributed to disposal within the meaning of RCRA Section 7003, 42 U.S.C. Section 6973. As a result of its assumptions of the leasehold rights and responsibilities of Douglas, Kayo is a past owner and/or operator of a facility, and has contributed to disposal within the meaning of RCRA Section 7003, 42 U.S.C. Section 6973. As described further in Section III.E. below, Respondent Conoco assumed liability to the owner of the fee title to the real property at the Former Service Station Site to respond to gasoline-related contamination that resulted from service station operations at that location. As a result of its assumption of the responsibilities of its subsidiaries, as well as its activities at the Former Service Station Site, Respondent Conoco is an owner and/or operator of a facility, and has contributed to disposal, within the meaning of RCRA Section 7003, 42 U.S.C. Section 6973, with respect to releases at that location.

E. RELEASES FROM RESPONDENTS' LEASEHOLD PROPERTY

26. In March, 1989, Adamian Oil Company, the then current operator of the Former Service Station Site, sent a letter to the County of Los Angeles providing a copy of a tank integrity test. The enclosed document indicated that testing was performed by Associated Environmental Systems Inc. on March 18, 1989. The enclosure indicates testing which showed that three 10,000 gallon tanks at the Former Service Station Site all passed tank and line tests performed using an AES/Brockman System, meeting the criteria of the National Fire Protection Association Method No. 329. However, soil sampling performed at the Former Service Station Site in December 1990 showed high levels of total petroleum hydrocarbons as high as 1,500,000 parts per billion (ppb) 40 feet below ground surface. EPA is not aware that any further soil investigation or any remediation was conducted during the period from December 1990 until the tanks were removed in July 1992.
27. After the end of the lease period in 1992, it was confirmed that the soil at the Former Service Station Site was contaminated with hydrocarbons. In July 1992, three underground storage tanks and associated fuel lines were

removed from the Site by Conoco. Each of the three tanks was 10,000 gallon capacity and constructed of single-walled welded steel. Each tank contained unleaded gasoline or leaded gasoline prior to tank removal. During the tank removal process, samples taken from below the fuel lines showed total petroleum hydrocarbon (TPH) levels were as high as 2,100,000 ppb; soil samples from below the USTs showed TPH levels as high as 550,000 ppb. Subsequent soil borings, in September 1992, found gasoline contamination down to 80 feet bgs - the greatest depth at which soil samples have been analyzed at the Former Service Station Site. At a silty sandy layer at approximately 35 feet bgs, TPH were reported to be as high as 5,400,000 ppb. Respondent Conoco's contractor issued its tank removal report on August 31, 1992. Conoco filed an "Underground Storage Tank Unauthorized Release (Leak) Contamination Site Report" with respect to the Former Service Station Site on September 2, 1992. The report was filed by Gregory Fletcher of Conoco, stating that he represented the "leasee" of the property. See Report provided as Attachment D.

28. Seven groundwater monitoring wells were installed at and downgradient from the Former Service Station Site from 1992 through 1994. (MW-1 through MW-4 were "on site" wells, MW-5 through MW-7 were downgradient.) A significant groundwater plume of gasoline constituent contamination was found. In wells placed on the former service station property, TPH levels in groundwater were as high as 34,000 ppb, and benzene levels as high as 750 ppb. Downgradient wells showed levels of TPH as high as 120,000 ppb, and benzene levels were as high as 8,300 ppb. From 1994 to 1997, TPH and benzene levels decreased in monitoring wells for the Site. TPH concentrations decreased from 120,000 ppb in November 1994 to 300 ppb in July 1997. Similarly, benzene levels decreased from 8,300 ppb in November 1997 to 2.5 ppb in July 1997.
29. In March 1992, Respondents Conoco, Kayo and Douglas entered into an agreement with an owner of the real property at the Former Service Station Site. Pursuant to that agreement, Conoco agreed to conduct all necessary remediation to address the gasoline-related contamination that resulted from service station operations at the Former Service Station Site. See Attachment L. During the period 1992 to 1996, Conoco performed investigation and remediation, including operation of a soil vapor extraction system from October 1993 through January 1996. Conoco's contractor estimated that the system removed approximately 47,000 pounds of hydrocarbons from the Former Service Station Site. (Secor, 1996c.)
30. On February 22, 1996, Conoco sent a letter to the Regional Board stating that Conoco shut down the soil vapor extraction

system on February 2, 1996. In explaining the shutdown, Conoco stated "[t]his decision was made by Conoco, Inc. in response to the Lawrence Livermore National Laboratory recent study on leaking underground storage tanks (LUST's) and their recommendations to the State Water Resources Control Board." Conoco's letter is provided as Attachment E.

31. Conoco's investigation of the Site from 1992 through 1996 addressed other gasoline constituent contamination, but until 1996 no soil sampling analyses for the presence of the gasoline additive MTBE were performed. In January 1996, a single soil sample was taken from silty soils at a depth of 35 feet bgs and analyzed for the presence of MTBE using EPA SW-846 Method 8020. This sample was found to contain MTBE at a concentration of 240 ppb. In eight groundwater sampling events from August 1994 to October 1997, groundwater was analyzed for MTBE. While no MTBE was detected in those groundwater samples, problems with the sampling techniques and the detection limits used limit the utility of this data for determining whether MTBE was present in those locations at that time.
32. On June 19, 1997, the Agencies sent Respondent Conoco a letter requiring the production of information including field work in order to determine whether the Former Service Station Site was a source of MTBE in the Charnock Sub-Basin. A copy of that letter is provided as Attachment F to this Order. The required field work was designed to provide screening level or preliminary data to indicate whether MTBE affecting the Charnock Sub-Basin had been released at the Site. This initial phase of investigation was not designed, however, to gather the data necessary to determine the scope, significance or quantity of any MTBE releases or the appropriate response to such releases.
33. Respondents Conoco, Kayo and Douglas provided a joint response to the written information request portion of the letter on July 25, 1997, provided as Attachment G. Conoco subsequently performed the field work requirements under the supervision of the Agencies. During the field work performed in January 1998, Conoco detected MTBE using EPA SW-846 Method 8260 in four of 56 soil samples. The soil samples with MTBE ranged from 30 to 55 feet bgs. MTBE was determined to be present in these samples at the following concentrations: 4.1 ppb J (estimated), 5.2 ppb, 6.2 ppb, and 15 ppb J (estimated). Four soil samples from two other borings at depths of 35 and 40 feet bgs contained relatively high concentrations of gasoline compounds; however, these samples were diluted and then analyzed for MTBE utilizing detection limits that exceeded the Agencies' specified detection limits by as much as 2,100 times. Therefore, it could not be determined, based

on this sampling, whether MTBE was present in these four soil samples above the Agencies' specified detection limits of 5-10 ppb. The oxygenate TBA was also detected at 410 ppb in one sample.

34. While no MTBE was detected in groundwater during the January, 1998, sampling, other gasoline constituent contamination was found in groundwater at the Site, including TPH at 170 ppb and benzene at 32 ppb. Further, only three of the ten groundwater monitoring wells at the Site were sampled in January 1998.
35. In April, 1998, Conoco detected MTBE in four groundwater monitoring samples at four different wells at the Site using SW-846 method 8260: MW-1 at 4.9 ppb J (estimated); MW-2 at 5.6 ppb; MW-3 at 2.4 ppb J (estimated) and MW-7 at 4.1 ppb J (estimated). This groundwater sampling was conducted pursuant to the Agencies' June 19, 1997 letter requirements. In subsequent groundwater sampling events, Conoco has continued to find low levels of MTBE in MW-2.
36. In summary, MTBE has been found at the Former Service Station Site in soil at levels as deep as 55 feet bgs and at concentrations as high as 240 ppb. Other gasoline components have been found throughout the soil to the water table. MTBE and other gasoline constituent contamination were also found in the shallow unnamed aquifer.
37. Due to defects in its initial investigation, Conoco was required to submit a report addendum. In a letter, dated July 30, 1998, the Agencies summarized the additional work required for Conoco to complete the first phase of investigation. A copy of that letter is provided as Attachment J to this Order. While Conoco has responded to the Agencies' letter in writing, it has not repeated any of the sampling that was found to be defective and not in compliance with the Agencies' June 19, 1997 requirements.
38. In the Agencies' July 30, 1998 letter referenced above, EPA recorded its determination that Respondents have contributed MTBE and other gasoline constituent contamination affecting the Charnock Sub-Basin. See Attachment J.
39. On July 20, 1998, the Agencies sent Respondent Conoco a letter proposing that Conoco resolve its liability at the Charnock MTBE Site by joining with other PRPs to allocate responsibility and remediate the contamination. The letter requested that Conoco and other PRPs contact the Agencies by August 27, 1998, to indicate their willingness to participate in settlement negotiations. The Agencies' letter is provided as Attachment I. Conoco responded on September 4, 1998, by

disputing its liability. Conoco's letter is provided as Attachment K.

40. EPA has determined that additional investigation of the Former Service Station Site, as provided in Attachment A, the Scope of Work, is necessary for EPA to determine the nature, magnitude and extent of the releases of MTBE and other gasoline constituents at this location and the appropriate response.

IV. CONCLUSIONS OF LAW AND DETERMINATION

Based on the Findings of Fact set forth above, EPA has concluded and determined that:

1. Respondents Conoco, Kayo and Douglas are "persons" as defined in Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15) and 40 C.F.R. Section 260.10 whose past or present handling, storage, treatment, transportation or disposal of "solid wastes" as defined by Section 1004(27) of RCRA, 42 U.S.C. Section 6903(27), have contributed to a condition which may present an imminent and substantial endangerment to health or the environment under Section 7003 of RCRA, 42 U.S.C. Section 6973.
2. Respondents, and each of them, are or were an owner and/or operator of a facility where past or present handling, storage, treatment, transportation or disposal of a solid waste resulted in discharges of MTBE and other gasoline constituents from underground storage tanks at the Former Service Station Site. These discharges or releases have contributed to contamination that may present an imminent and substantial endangerment to health and the environment, within the meaning of RCRA Section 7003, 42 U.S.C. Section 6973.
3. MTBE and other gasoline constituents that were released from the Former Service Station Site at 11198 Washington Place are "solid wastes" as defined by Section 1004(27) of RCRA, 42 U.S.C. Section 6903(27). These releases may present an imminent and substantial endangerment to public health or the environment under Section 7003 of RCRA, 42 U.S.C. Section 6973.
4. Respondents are jointly and severally liable under Section

7003 of RCRA Section 6973, 42 U.S.C. Section 6973, because they have each contributed to the handling, storage, treatment, transportation or disposal of solid waste at the Former Service Station Site which may present an imminent and substantial endangerment to health or the environment.

5. Respondents are jointly and severally liable under Section 7003 of RCRA Section 6973, 42 U.S.C. Section 6973, for performing further site assessment with respect to the MTBE and other gasoline constituent contamination releases from the USTs at the Former Service Station Site.
6. Based on the foregoing FINDINGS OF FACT AND CONCLUSIONS OF LAW, and on the Administrative Record, the Director of the Waste Management Division of EPA, Region IX, has determined that issuance of this Order is necessary to protect public health and the environment.

ORDER

Based on the foregoing FINDINGS OF FACT AND CONCLUSIONS OF LAW, the Administrative Record, and the foregoing determination, it is hereby ORDERED that:

1. Respondents shall fully cooperate with EPA and its authorized representatives in carrying out the provisions of this Order, including the taking of all actions set forth below within the time periods and in the manner prescribed, performing the additional site investigation and assessment, including an assessment of what remediation is necessary, as required by this Order and the attached Scope of Work (SOW), provided as Attachment A.
2. Effective immediately upon receipt of this Order, Respondents shall take no action in connection with the contamination at the Site other than those actions required or permitted by EPA and/or the Agencies.

V. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Order which are defined in RCRA shall have the meanings assigned to them in that Act. Whenever the terms listed below are used in this Order, the following definitions apply:

1. "Agencies" shall mean either the United States Environmental Protection Agency, or the California Regional Water Quality Control Board, Los Angeles Region, and the United States Environmental Protection Agency, acting jointly.
2. "Agencies' General Requirements" shall mean the Agencies' requirements for MTBE and other gasoline constituent contamination investigation provided as Attachment B to this Order.
3. "Charnock Sub-Basin" shall mean the area of Los Angeles and Culver City bounded by the Overland Fault to the east, the Ballona escarpment to the south, the Charnock Fault to the west, and the base of the Santa Monica Mountains to the north.
4. "Charnock Wellfields" shall mean the drinking water supply wells operated by the City of Santa Monica at 11375 Westminster Avenue, Los Angeles, and the drinking water wells operated by the Southern California Water Company at 11607 and 11615 Charnock Road, Los Angeles.
5. "City" shall mean the City of Santa Monica, an Impacted Party.
6. "Days" shall mean calendar days, unless otherwise specified.
7. "EPA" shall mean the United States Environmental Protection Agency.
8. "Former Service Station Site" shall mean the property located at 11198 Washington Place, Culver City.
9. "General Requirements" shall mean the specifications provided in Attachment B to this Order, and incorporated herein by this reference.
10. "Groundwater" shall mean the subsurface water that fills available openings in rock and/or soil materials such that they may be considered saturated.
11. "Impacted Parties" shall mean the City of Santa Monica and the Southern California Water Company.
12. "MCL" shall mean a federal or State promulgated standard for

the Maximum Contaminant Level of a particular chemical when present in water to be served for domestic use by a public water system.

13. "Methyl Tertiary-Butyl Ether" or "MTBE" shall mean the chemical whose CAS registry number is 1634-04-4.
14. "ppb" shall mean parts per billion. Note that in some instances when this unit of measurement has been used for soil samples it represents a conversion from the original units in which the analyses of the chemical contents at issue were presented as either milligrams or micrograms per kilogram. Further, in some instances when this unit of measurement has been used for groundwater samples it represents a conversion from the original units in which the analyses of the chemical contents at issue were presented as either milligrams or micrograms per liter.
15. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. Sections 6901, et seq.
16. "Regional Board" shall mean the California Regional Water Quality Control Board, Los Angeles Region.
17. "Release(s)" shall mean discharge(s) or disposal as those terms are used in RCRA.
18. "Remedial Action" shall mean activities required by EPA and/or the Agencies to control or eliminate releases of MTBE and/or other gasoline constituent contamination from the Site.
19. "Scope of Work" shall mean the document provided as Attachment A to this Order and incorporated herein by this reference. The Scope of Work will also be referred to as the "SOW."
20. "SCWC" shall mean the Southern California Water Company, an Impacted Party.
21. "Site" shall mean the area of the former gasoline service station located at 11198 Washington Place, Culver City, and all locations where the MTBE and other gasoline constituent contamination from the USTs and UST system formerly operated there have come to be located.
22. "Tertiary-Butyl Alcohol" or "TBA" shall mean the chemical whose CAS registry number is 75-65-0.
23. "USTs" shall mean underground storage tank systems, including the underground storage tanks and associated piping and equipment formerly located at 11198 Washington Place, Culver City.

24. "Work" shall mean those requirements set forth in Section VI. of this Order (Work to be Performed) and the attached Scope of Work (SOW).

VI. WORK TO BE PERFORMED

1. Respondents are ordered to perform the investigation, assessment and all other activities required by the SOW, provided as Attachment A, and by this Order. Respondents shall make submittals and certifications as set forth below and within the time schedules specified in the SOW. All days specified below and in the SOW are consecutive calendar days from the Effective Date of this Order. Due dates falling on a Saturday, Sunday, or federal holiday will be automatically extended to the next business day.
2. Commencing on the Effective Date of this Order, monthly progress reports ("Progress Reports") shall be submitted in accordance with the SOW. The first such Progress Report shall be due as provided in the SOW.
3. Respondents shall jointly submit workplans as provided in the SOW.
4. Respondents shall continue to perform all tasks required by the Agencies pursuant to their letter to Respondent Conoco dated July 30, 1998, provided as Attachment J, as amended by the SOW.

VII. NOTICES AND SUBMISSIONS

1. Whenever, under the terms of this Order, written notice is required to be given, or any document is required to be sent by one Party to another, it shall be provided as directed in this section. When Respondents are required to provide notice or submittals to EPA, they shall also provide a copy of the notice or submittal, in the same quantity and in the same manner as required for EPA, to the Regional Board's and the Impacted Parties' representatives as listed below, except when different quantities or manner of notice are provided elsewhere in this Order including in Attachment B, General Requirements. Notice shall be provided to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. All notices and submissions shall be sent by either certified mail, return receipt requested, overnight

mail or facsimile, and notice shall be effective upon receipt, unless otherwise provided herein.

2. With respect to any and all submissions to the Agencies required by this Order, including those required pursuant to the SOW, Respondents shall provide two hard copies and one electronic copy of each document to each of the following Project Coordinators at the addresses specified below (a total of 3 copies to EPA), unless those Project Coordinators or their successors give notice of a change to the Respondents in writing (Note: A distribution list for electronic copies is provided in the General Requirements, Attachment B to this Order):

Project Coordinators for Agencies and Impacted Parties

As to EPA:

(2 Copies)

Steven Linder, Project Coordinator
Greg Lovato, Alternate Project Coordinator
Office of Underground Storage Tanks (WST-8)
Waste Management Division
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901
Phone: (415) 744-2036(Steven Linder)
Phone: (415) 744-2112(Greg Lovato)
Fax: (415) 744-1026(Steven Linder)
Fax: (415) 744-2054(Greg Lovato)
E-Mail: linder.steven@epa.gov, lovato.greg@epa.gov

As to EPA Continued:

(1 Copy)

Walter Crone
Ninyo & Moore
9272 Jeronimo Road, Suite 123 A
Irvine, CA 92618-1914
E-Mail: wcrone@ninyoandmoore.com

As to the Regional Board:

David Bacharowski
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Phone: (213) 576-6620
Fax: (213) 576-6700
E-Mail: DBACHARO@rb4.swrcb.ca.gov

As to the City of Santa Monica:

Gil Borboa
City of Santa Monica
1212 Fifth St. 3rd Floor
Santa Monica, CA 90401
Phone: (310) 458-8230
Fax: (310) 393-6697
E-mail: gil-borboa@ci.santa-monica.ca.us

As to the Southern California Water Company:

Denise Kruger
Southern California Water Company
630 E. Foothill Blvd.
San Dimas, CA 91773
Phone: (909) 394-3600
Fax: (909) 394-0827
E-mail: dlkruger@scwater.com

Whenever, under the terms of this Order, EPA provides notice to Respondents, EPA will direct this notice to:

As to Respondents Conoco, Kayo and Douglas:

Kim Burns
Conoco, Inc.
600 N. Dairy Ashford
Houston, Texas 77252
Telephone: (281) 293-2867
Facsimile: (281) 293-3305
E-Mail: kim.h.burns@usa.conoco.com

Respondents may designate successor representatives, either individually or jointly.

3. With respect to all submissions and notices, including but not limited to notice of a change of Project Coordinator, notice of a delay in performance, notice of an endangerment, or notice of a failure to obtain access to property not owned or leased by Respondents, but excluding proposed Workplans and technical reports prepared pursuant to the SOW, Respondents shall also provide written notice to the individuals at the addresses specified below (in addition to the individuals listed in subparagraph 2 above) unless the individuals listed below or their successors give written notice of a change to Respondents.

As to EPA:

Laurie Williams, Esq.
Office of Regional Counsel (ORC-3)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Telephone: (415) 744-1387
Facsimile: (415) 744-1041
E-Mail: williams.laurie@epa.gov

Brad O'Brien, Esq.
Environmental Enforcement Division
U.S. Department of Justice
301 Howard Street
San Francisco, CA 94105
Telephone: (415) 744-6484
Facsimile: (415) 744-6476
E-Mail: brad.o'brien@usdoj.gov

As to the Regional Board:

Jorge Leon, Esq.
State Water Resources Control Board
901 P. Street
Sacramento, CA 95814
Telephone: (916) 657-2428
Facsimile: (916) 653-0428
E-Mail: JLEON@exec.swrcb.ca.gov

Marilyn Levin, Esq.
Department of Justice
Office of the Attorney General
300 S. Spring Street, Suite 500
Los Angeles, CA 90013
Telephone: (213) 897-2612
Facsimile: (213) 897-2616
E-Mail: levinm@hdcdojnet.state.ca.us

As to the City of Santa Monica:

Joseph Lawrence, Esq.
Office of City Attorney
City of Santa Monica
1685 Main Street
Santa Monica, CA 90401
Telephone: (310) 458-8375
Facsimile: (310) 395-6727
E-Mail: Joe-Lawrence@CI.SANTA-MONICA.ca.us

Barry Groveman, Esq.
Proskauer, Rose, Goetz & Mendelsohn
2121 Avenue of the Stars, Suite 2700
Los Angeles, CA 90067-5010
Telephone: (310) 284-5667
Facsimile: (310) 557-2193
E-Mail: BGROVEMAN@Proskauer.com

As to the Southern California Water Company:

Robert Saperstein, Esq.
Hatch & Parent
21 East Carrillo Street
Santa Barbara, CA 93101-2782
Telephone: (805)963-7000
Facsimile: (805)865-4333
E-Mail: rob_saperstein@msn.com

4. EPA has been informed that Respondents have designated Kim Burns (see contact information above) as their Project Coordinator. Unless Respondents provide written notice to EPA of a successor or successors, EPA will provide all correspondence and notices under this Order to Kim Burns at the address listed above.
5. EPA has been informed that Respondents have jointly designated the following attorney contact:

Michael Steinberg
Morgan, Lewis & Bockius
1800 M Street, N.W.
Washington, D.C. 20036-5869
Telephone: (202) 467-7141
Facsimile: (202) 467-7176
E-Mail: 7141@mlb.com

VIII. APPROVALS/DISAPPROVALS

1. After review of any deliverable, plan, report, or other item which is required to be submitted for review and approval pursuant to this Order, EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondents to re-submit the document after incorporating EPA's comments; or (d) disapprove the submission and assume responsibility for performing all or any part of the response action. As used in this Order, the terms "approval by EPA," "EPA approval" or a similar term means the actions described in clauses (a) or (b) of this paragraph. EPA may choose to provide its approval,

modification or disapproval jointly with the Regional Board in a letter from the Agencies.

2. In the event of approval or approval with modifications by EPA, Respondents shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA.
3. Upon receipt of a notice of disapproval or a request for a modification, Respondents shall, within twenty-one (21) days or such longer or shorter time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, or other item for approval. Notwithstanding the notice of disapproval or approval with modifications, Respondents shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.
4. In the event that a re-submitted plan, report or other item, or portion thereof is disapproved by EPA, EPA may again require Respondents to correct the deficiencies in accordance with the preceding paragraphs. EPA also retains the right to develop the plan, report or other item. Respondents shall implement any such plan, report or item as amended or developed by EPA.
5. If any submission is not approved by EPA after re-submission in accordance with the immediately preceding paragraph, Respondents shall be deemed in violation of the provision of this Order requiring Respondents to submit such plan, report or item.
6. Any deliverables, plans, reports or other item required by this Order to be submitted for EPA review and approval are, upon approval of EPA, incorporated into this Order and enforceable hereunder.

IX. ADDITIONAL RESPONSE ACTIVITIES

1. In the event EPA determines that additional response activities are necessary, in light of all relevant circumstances, to determine the nature, magnitude and extent of the releases at the Former Service Station Site and the appropriate response, EPA may notify Respondents that additional response activities are necessary.
2. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional response activities are necessary to determine Respondents' contribution to the threat of MTBE and other gasoline constituent contamination in

the Charnock Sub-Basin or to determine the appropriate corrective measures to address this contribution, Respondents shall submit for EPA approval a workplan for the additional response activities. The workplan shall conform to all applicable requirements of this Order, including but not limited to Sections VI (Work to Be Performed), XV (Quality Assurance, Sampling, Data Analysis and Prior Notice of Field Activities), and XVII (Reservation of Rights, Non-Waiver, Compliance with Laws and Enforcement) of this Order. Upon EPA's approval of the workplan pursuant to Section VIII (Approvals/Disapprovals) of this Order, Respondents shall implement the workplan for additional response activities in accordance with the provisions and schedule contained therein.

**X. ACCESS TO PROPERTY OWNED OR LEASED BY RESPONDENTS
AND DATA/DOCUMENT AVAILABILITY**

1. If any of the property at which the Work required pursuant to this Order is to be performed is owned or leased by Respondents, then Respondents shall provide access to EPA and the Regional Board and their authorized representatives, as well as to the Impacted Parties and their authorized representative, to observe and oversee the Work.

XI. ACCESS TO PROPERTY NOT OWNED OR LEASED BY RESPONDENTS

1. To the extent that any of the property at which the Work required pursuant to this Order is to be performed is not owned or controlled by Respondents, then Respondents will obtain, or use their best efforts to obtain, site access agreements from the present owner(s) and/or lessees, as the case may be, within sixty (60) days of the Effective Date of this Order if the need for site access is known as of the Effective Date of the Order, or, if not known as of the Effective Date of this Order, within sixty (60) days of EPA approval of any work plan, report or document pursuant to this Order which requires Work on such property. "Best efforts" as used in this paragraph shall include, at a minimum, but shall not be limited to: (a) a certified letter from Respondents to the present owner(s) and/or lessee(s) of the property requesting access agreements to permit Respondents, EPA, the Regional Board and the Impacted Parties and their authorized representatives access to such property, and (b) the payment of reasonable compensation in consideration for such access, if the owner and/or lessee of such property have not been designated as a Potentially Responsible Party (PRP) for the

Charnock MTBE and other gasoline constituent contamination by the Agencies or is no longer designated as a PRP. "Reasonable sums of money" means the fair market value of the right of access necessary to implement the requirements of this Order.

2. All site access agreements entered into pursuant to this Order shall provide access for EPA, its contractors and oversight officials, the State and its contractors, and the Impacted Parties and their contractors, as well as Respondents and Respondents authorized representatives. Such agreements shall specify that Respondents and their contractors are not EPA's representatives or agents.
3. If access agreements are not obtained within the time set forth above, Respondents shall immediately notify EPA, in writing, of the failure to obtain access, specifying the efforts undertaken to obtain access. Subject to the United States' non-reviewable discretion, EPA may elect to use its legal authorities to obtain access for the Respondents, may perform those response actions with EPA staff and/or contractors at the property in question, or may terminate the Order if Respondents cannot obtain access agreements. If EPA performs those tasks or activities with staff and/or contractors and does not terminate the Order, Respondents shall perform all other activities not requiring access to that property, and shall reimburse EPA to the full extent allowed by law for all response costs incurred in performing such activities. Respondents shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.
4. Respondents shall allow EPA and its authorized representatives, the Regional Board and its representatives, and the Impacted Parties and their representatives to enter and freely move about the Site at all reasonable times for the purpose of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or the Work; reviewing the progress of Respondents in carrying out the terms of this Order; conducting tests as EPA or its authorized representatives deem necessary; using a camera, sound recording device or other documentary type equipment; verifying the data submitted to EPA by Respondents; and copying all records, files, photographs, documents, sampling and monitoring data, and other writings related to work undertaken in carrying out this Order. Notwithstanding any provision of this Order, the United States and EPA retain all of their information gathering, inspection and access authorities and rights, including enforcement authorities related thereto.
5. No provision of this Order shall be interpreted as limiting or

affecting Respondents' right to assert a business confidentiality claim, pursuant to 40 C.F.R. Part 2, Subpart B, covering all or part of the information submitted to EPA pursuant to the terms of this Order. If no such confidentiality claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Respondents. Respondents shall not assert any business confidentiality claim with regard to Site conditions or any physical, sampling, monitoring or analytic data. Respondents shall maintain for the period during which the Order is in effect an index of any documents that Respondents claim contain confidential business information. The index shall contain, for each document, the date, author, addresses, and subject of the document as well as the pages on which any information claimed to be confidential business information appears. Upon written request from EPA, Respondents shall submit a copy of the index to EPA.

XII. ENDANGERMENT AND EMERGENCY RESPONSE

1. In the event Respondents, or any of them, identify a current or immediate threat to human health and the environment, Respondent or Respondents, as the case may be, shall immediately notify the EPA Project Coordinator (or his alternate if not available) by telephone. If neither of these persons are available, Respondent or Respondents shall immediately notify first, the Chief, Office of Underground Storage Tanks, at (415) 744-2079, and, if not available, the EPA Region IX Emergency Response Section at (415) 744-2000. Simultaneous notification shall be made to the Regional Board's Project Manager by telephone. In addition to the telephonic notice, written notification shall be made to EPA within twenty-four (24) hours of first obtaining knowledge of the threat, summarizing the immediacy and magnitude of the current or immediate threat to human health and the environment.
2. Respondents shall take immediate action to prevent, abate, or minimize the threat in consultation with EPA's Project Coordinator and in accordance with all applicable provisions of this Order, including but not limited to the Health and Safety Plan. Respondent shall thereafter submit for EPA approval, as soon as possible but no later than five (5) days after identification of the threat, a plan to mitigate the threat. EPA will approve or modify the plan, and Respondents shall implement the plan as approved or modified by EPA. In the event that Respondent or Respondents fail to take appropriate response action as required by this Section, and EPA takes that action instead, Respondent or Respondents shall

reimburse EPA for all costs of the response action to the full extent allowed by law.

3. If EPA determines that any action or occurrence during the performance of the Work causes or threatens to cause a release or disposal of hazardous substances, pollutants or contaminants, regulated substances or hazardous or solid wastes which may present an imminent and substantial endangerment to the public health or welfare or the environment, EPA may direct Respondents to undertake any action EPA determines is necessary to abate such disposal or release or threatened release and/or direct Respondents to cease activities Respondents are then undertaking pursuant to this Order for such time as may be needed to abate any such disposal or release or threatened release.
4. Nothing in this Section shall be deemed to limit any authority of the United States to take, direct or order all appropriate action to protect human health and the environment or to prevent, abate or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, regulated substances or hazardous or solid wastes at or from the Site.

XIII. RECORD PRESERVATION

1. Respondents shall provide to EPA upon request copies of all documents and information within their possession and/or control or that of their contractors, employees or agents relating to activities at the Site or to the implementation of this Order, including but not limited to sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to EPA for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
2. Until ten (10) years after termination of this Order, each Respondent shall preserve and retain all records and documents in its possession or control, including the documents in the possession or control of its contractors, employees or agents on and after the Effective Date of this Order that relate in any manner to the Site, including but not limited to records, documents or other information relating to its potential liability with regard to the Site. At the conclusion of this document retention period, each Respondent shall notify EPA at least ninety (90) calendar days prior to the destruction of any such records or documents, and upon request by EPA, shall

deliver any such records or documents to EPA.

3. Until ten (10) years after termination of this Order, each Respondent shall preserve, and shall instruct its contractors and agents to preserve, all documents, records, and information of whatever kind, nature or description relating to the performance of the Work. Upon the conclusion of this document retention period, each Respondent shall notify the EPA at least ninety (90) days prior to the destruction of any such records, documents or information, and, upon request of the EPA, shall deliver all such documents, records and information to EPA.

XIV. PROJECT COORDINATORS

1. Within ten (10) days after the Effective Date of this Order, Respondents shall designate a Project Coordinator for compliance with this Order and shall submit the Project Coordinator's name, address, telephone number, facsimile number and e-mail address to EPA for review and approval. Respondents' Project Coordinator shall be responsible for overseeing Respondents' implementation of this Order. If Respondent(s) wish to change their Project Coordinator, said Respondent(s) shall provide written notice to EPA, five (5) days prior to changing the Project Coordinator, of the name and qualifications of the new Project Coordinator.
2. EPA hereby designates Steven Linder as the EPA Project Coordinator, and Greg Lovato as the EPA Alternate Project Coordinator. EPA has the unreviewable right to change its Project Coordinator and/or its Alternate Project Coordinator. If EPA changes its Project Coordinator or Alternate Project Coordinator, EPA will inform Respondents in writing of the name, address, and telephone number of the new Project Coordinator or Alternate Project Coordinator.
3. The Project Coordinators will be responsible for overseeing the implementation of the Work. The EPA Project Coordinator will be EPA's primary designated representative at the Site for this purpose. To the maximum extent possible, all communications, whether written or oral, between Respondents and EPA concerning the Work to be performed pursuant to this Order shall be directed through the Project Coordinators.

XV. QUALITY ASSURANCE, SAMPLING, DATA ANALYSIS AND PRIOR NOTICE OF FIELD ACTIVITIES

1. Respondents shall comply with the EPA quality assurance and quality control requirements, except to the extent that they

are modified by the requirements of Attachment B to this Order (General Requirements). To provide quality assurance and maintain quality control, Respondents shall:

- a. Ensure that the laboratory used by Respondents for analyses performs according to a method or methods deemed satisfactory to EPA and submits all protocols to be used for analyses to EPA as part of the sampling and analysis plan described in subparagraph c., below. If methods other than those in SW-846 are proposed for use, Respondents shall submit all proposed protocols accompanied by an appropriate justification and a demonstration of the effectiveness and applicability of the proposed alternative to EPA for approval at least thirty (30) days prior to the commencement of analysis and shall obtain EPA approval prior to the use of such protocols.
 - b. Ensure that EPA personnel and EPA's authorized representatives are allowed access to the laboratory and personnel utilized by Respondents for analyses.
 - c. Prepare and submit a sampling and analysis plan for collection of data at the site, based on the guidance listed above, no less than thirty (30) days prior to commencing field sampling activities, or, in the case of field activities to be performed in connection with any Site Assessment Work Plan, at the time of the submission of such Site Assessment Work Plan to EPA for review and approval.
2. Notify EPA, the Regional Board and the Impacted Parties in writing at least 5 days before engaging in any field activities pursuant to this Order. At the request of EPA, Respondents shall provide or allow EPA, the Regional Board, the Impacted Parties or their authorized representatives to draw split or duplicate samples of all samples collected by Respondents with regard to this Site or pursuant to this Order. Nothing in this Order shall limit or otherwise affect EPA's authority to draw samples pursuant to applicable law.
 3. Respondents shall submit to EPA, the Regional Board and the Impacted Parties the results of all sampling and/or tests and other data generated by, or on behalf of, Respondents, in accordance with the requirements of this Order, the SOW and any workplans approved under this Order.

XVI. DELAY IN PERFORMANCE

1. Any delay in performance of this Order that, in EPA's

judgment, is not properly justified by Respondents under the terms of this paragraph shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondents' obligations to fully perform all obligations under the terms and conditions of this Order.

2. Respondents shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone to EPA's Project Coordinator or Alternate Project Coordinator within forty-eight (48) hours after Respondent or Respondents first knew or should have known that a delay might occur. Respondent or Respondents shall adopt all reasonable measures to avoid or minimize any such delay. Within five (5) business days after notifying EPA by telephone, EPA shall be provided with written notification fully describing the nature of the delay, any justification for the delay, any reason why Respondent(s) should not be held strictly accountable for failing to comply with any relevant requirements of this Order, the measures planned and taken to minimize the delay, and a schedule for implementing the measures that will be taken to mitigate the effects of the delay. Increased costs or expenses associated with implementation of the activities called for in this Order are not a justification for any delay in performance.

XVII. RESERVATION OF RIGHTS, NON-WAIVER, COMPLIANCE WITH LAWS AND ENFORCEMENT

1. EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, remedies and defenses, both legal and equitable, including the right to disapprove Work performed by Respondents pursuant to this Order, to perform any portion of the Work required herein and to require that Respondents perform tasks in addition to those required by this Order. This reservation of rights also includes the right to require additional site characterization, feasibility studies and/or response or corrective actions pursuant to RCRA, the Safe Drinking Water Act (SDWA) or other applicable legal authorities. EPA reserves its right to seek reimbursement from Respondents for costs incurred by the United States to the full extent allowed by law. This Order shall not be construed as a covenant not to sue, release, waiver or limitation of any rights, remedies, powers or authorities, civil or criminal, which EPA has under RCRA, SDWA, or any other statutory, regulatory or common law enforcement authority of the United States.
2. EPA further reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, which may pertain to Respondents' failure to comply

with any of the requirements of this Order, including without limitation, the assessment of penalties under Sections 7003 and 9006 of RCRA, 42 U.S.C. Sections 6973 and 6991e. Nothing in this Order shall limit or preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, or from requiring Respondents in the future to perform additional activities pursuant to Subtitle I of RCRA, 42 U.S.C. Section 6991 et seq., and the regulations promulgated thereunder, or any other applicable law or regulation and/or from taking additional actions as EPA may deem necessary at the Site or at any other facility. EPA reserves its right to seek reimbursement from Respondents for such costs incurred by the United States to the full extent allowed by law, including, but not limited to a cost recovery action under RCRA, including Section 9003(h) of RCRA, 42 U.S.C. Section 6991b(h) of RCRA.

3. All activities undertaken by Respondents pursuant to this Order shall be performed in accordance with the requirements of all applicable federal, state and local laws and regulations. Compliance by Respondents with the terms of this Order shall not relieve Respondents of their obligations to comply with RCRA or any other applicable federal or state laws and regulations.
4. This Order is not, and shall not be construed as a permit issued pursuant to any federal or state statute or regulation. This Order does not relieve Respondents of any obligation to obtain and comply with any federal, state or local permit. Where any portion of the Work requires a federal, state or local permit or approval, Respondents shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.
5. Notwithstanding any provision of this Order, the United States hereby retains all of its information gathering, inspection and enforcement authorities and rights under Sections 3007, 7003 and 9005 of RCRA, 42 U.S.C. Section 6927, 6973 and 6991d, Section 1431 of SDWA, 42 U.S.C. Section 300i, and any other applicable statutes or regulations.
6. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, entity or corporation for any liability such person, firm, partnership, entity or corporation may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, regulated substances, pollutants, contaminants or solid wastes found at, taken to, or taken from the Site.

7. If a court issues an order that invalidates or stays any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XVIII. LIABILITY INSURANCE

1. At least seven (7) days prior to commencing any Work at the Site pursuant to this Order, each Respondent shall submit to EPA a certification that Respondent or its contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondent pursuant to this Order. Comprehensive general liability insurance coverage or indemnification shall be at least in the amount of two million dollars (\$2,000,000) in annual aggregate coverage. Each Respondent shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Order.

XIX. OPPORTUNITY TO CONFER

1. Respondent(s) may, within ten (10) days after the date this Order is signed, request a conference with EPA and the Regional Board to discuss this Order. If requested, the conference shall occur at a time and location to be selected by the Agencies in consultation with Respondents. A tentative date, time and location of Tuesday, May 11, 1999 at 1:00 p.m., at EPA's Regional Office at 75 Hawthorne Street, San Francisco, California, has been discussed by the parties.
2. The purpose and scope of the conference shall be limited to issues involving the implementation of the Work and any other response actions required by this Order and the extent to which Respondents intend to comply with this Order. This conference is not an evidentiary hearing, and does not constitute a proceeding to challenge this Order. It does not give Respondents a right to seek review of this Order, or to seek resolution of potential liability, and no official stenographic record of the conference will be made. At any conference held pursuant to Respondents' request, each Respondent may appear in person or by an attorney or other representative.

3. Requests for a conference must be made by telephone ((415) 744-1387) followed by written confirmation mailed that day to Laurie Williams, Assistant Regional Counsel, at the address set forth above, or by facsimile to (415) 744-1041.

XX. NOTICE OF INTENTION TO COMPLY

1. Each Respondent shall provide, not later than five (5) days after the Effective Date of this Order, written notice to Laurie Williams, Assistant Regional Counsel, at the address set forth above, stating whether it will comply with the terms of this Order. If each Respondent does not unequivocally commit to perform the Work required by this Order, then that Respondent shall be deemed to have violated this Order and to have failed or refused to comply with this Order. The absence of a response by EPA to the notice required by this paragraph shall not be deemed to be acceptance of any assertions that Respondents may make in their respective notices.

XXI. PENALTIES FOR NON-COMPLIANCE

1. Section 7003(b) of RCRA, 42 U.S.C. Section 6973(b), provides that "[a]ny person who willfully violates, or fails or refuses to comply with, any Order of the Administrator under [RCRA Section 7003(a)] may, in an action brought in the appropriate United States district court to enforce such order, be fined not more than \$5,000 for each day in which such violation occurs or such failure to comply continues." This amount is subject to the increase provided for in Public Law 101-410, enacted October 5, 1990; 104 Stat. 890, as amended by the Debt Collection Improvement Act of 1996 (31 U.S.C. 3701). See 61 Fed. Reg. 69359 (December 31, 1996)(Civil Monetary Penalty Inflation Adjustment Rule; Final Rule); 40 C.F.R. Part 19.

XXII. NO FINAL AGENCY ACTION

1. Notwithstanding any other provision of this Order, no action or decision by EPA pursuant to this Order, including without limitation, decisions of the Regional Administrator, the Director of the Waste Management Division or her successor, or any authorized representative of EPA, shall constitute final agency action giving rise to any rights of judicial review prior to EPA's initiation of a judicial action for violation of this Order, which may include an action for penalties and/or an action to compel Respondents' compliance with the terms and conditions of this Order. In any action brought by EPA to enforce this Order, Respondents shall bear the burden of proving that EPA's action was arbitrary and capricious or not in accordance with law.

XXIII. EFFECTIVE DATE AND COMPUTATION OF TIME

1. This Order shall be effective without further notice thirty (30) days after the Order is signed by the Director of the Waste Management Division ("Effective Date"). All times for performance of ordered activities shall be calculated from this Effective Date.

XXIV. MODIFICATION AND INTERPRETATION

1. This Order may be amended or modified by EPA. Such amendment shall be in writing and shall have as its effective date that date which is ten (10) days after the date the amendment or modification is signed by the Director of the Waste Management Division.
2. The EPA Project Coordinator may agree to changes in the scheduling of Work. Any such changes must be requested in writing by Respondents and be approved in writing by the EPA Project Coordinator.
3. No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules and any other writing submitted by Respondents will be construed as an amendment or modification of this Order.

4. The headings in this Order are for convenience of reference only and shall not affect interpretation of this Order.

IT IS SO ORDERED.

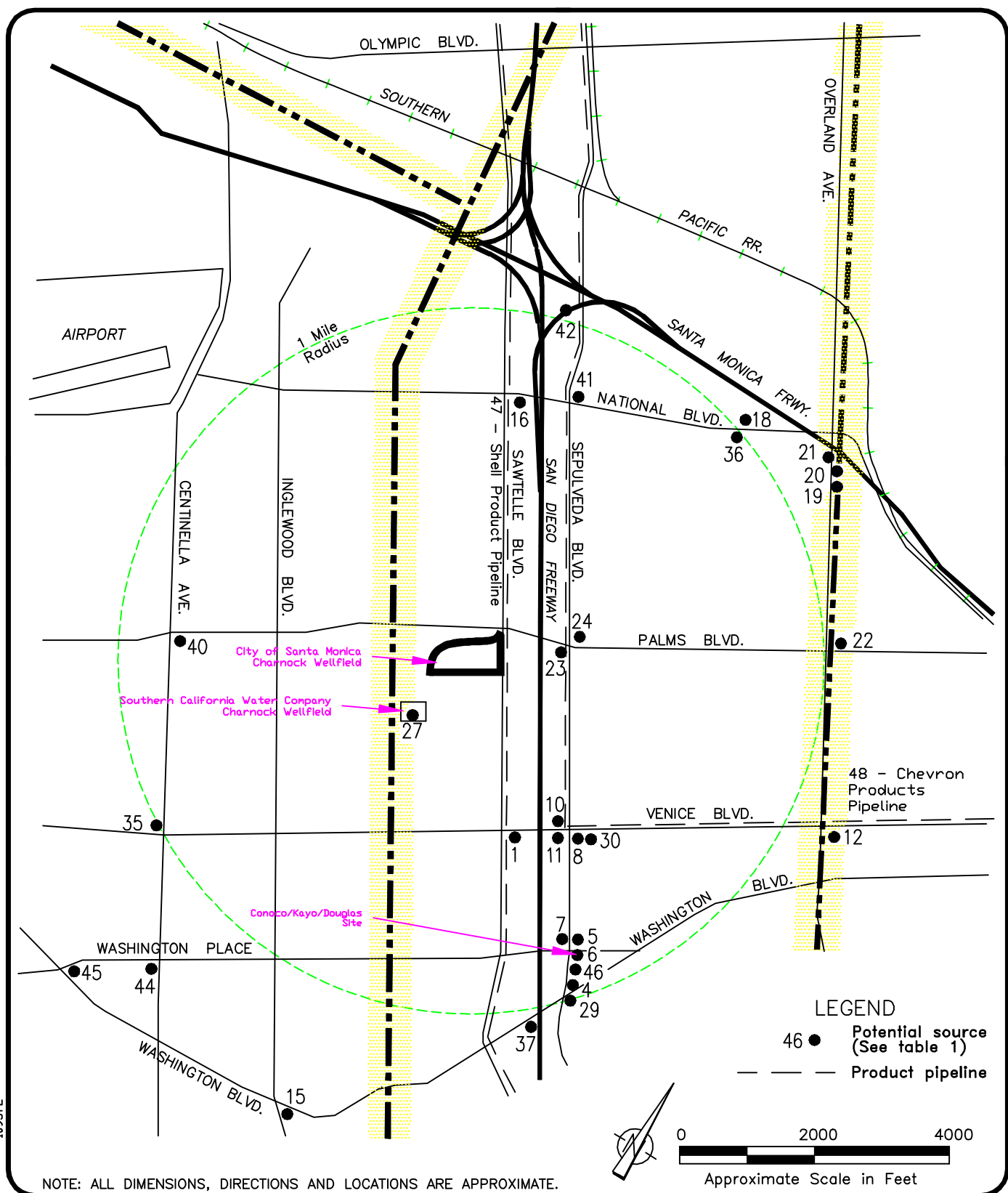
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX

By: *Original signed by JA, 4/20/99*

JULIE ANDERSON
Director
Waste Management Division
EPA REGION IX

DATED: April __, 1999

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Los Angeles
Regional Water
Quality Control
Board / U.S.
Environmental
Protection Agency



SITE PLAN CHARNOCK WELL FIELD VICINITY SHOWING PRP REGION AND LOCATION OF POTENTIAL SOURCES SANTA MONICA, CALIFORNIA

PROJECT NO.

DATE

04/99

FIGURE

1